

WHAT IS CLAIMED IS:

5 1. Isolated DNA coding for the CstMI restriction enzyme, wherein the isolated DNA is obtainable from *Corynebacterium striatum*.

10 2. A recombinant DNA vector comprising a vector into which a DNA segment coding for the CstMI endonuclease has been inserted.

15 3. Isolated DNA coding for the CstMI endonuclease/methyltransferase, wherein the isolated DNA is obtainable from ATCC Accession No._____.

4. A Vector which comprises the isolated DNA of claim 3.

20 5. A host cell transformed by the vector of claim 2 or 4.

25 6. A method of producing an CstMI restriction endonuclease and CstMI methylase comprising culturing the host cell of claim 5 under conditions suitable for expression of said endonuclease.

30 7. A substantially pure type II restriction endonuclease obtainable from *Corynebacterium striatum* recognizing the following base sequence in double-stranded deoxyribonucleic acid molecules:

5'-AAGGAGN20↓-3'
3'-TTCCTCN18↑-5'

35 and having a cleavage position defined by the arrows.

8. A method for obtaining Type II restriction
endonuclease of claim 7, comprising cultivating a sample
of *Corynebacterium striatum* under conditions favoring
the production of said endonuclease and separating said
endonuclease therefrom.

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9. The Type II restriction endonuclease of claim 7,
wherein the restriction endonuclease is purified from
GenBank Accession #AAG03371.

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